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NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	Feb 24	PCTGEN now available on STN
NEWS	4	Feb 24	TEMA now available on STN
NEWS	5	Feb 26	NTIS now allows simultaneous left and right truncation
NEWS	6	Feb 26	PCTFULL now contains images
NEWS	7	Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS	8	Mar 24	PATDPAFULL now available on STN
NEWS	9	Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS	10	Apr 11	Display formats in DGENE enhanced
NEWS	11	Apr 14	MEDLINE Reload
NEWS	12	Apr 17	Polymer searching in REGISTRY enhanced
NEWS	13	SEP 09	CA/CAPLUS records now contain indexing from 1907 to the present
NEWS	14	Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS	15	Apr 28	RDISCLOSURE now available on STN
NEWS	16	May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS	17	May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS	18	May 15	Supporter information for ENCOMPAT and ENCOMPLIT updated
NEWS	19	May 19	Simultaneous left and right truncation added to WSCA
NEWS	20	May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS	21	Jun 06	Simultaneous left and right truncation added to CBNB
NEWS	22	Jun 06	PASCAL enhanced with additional data
NEWS	23	Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS	24	Jun 25	HSDB has been reloaded
NEWS	25	Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS	26	Jul 21	Identification of STN records implemented
NEWS	27	Jul 21	Polymer class term count added to REGISTRY
NEWS	28	Jul 22	INPADOC: Basic index (/BI) enhanced; Simultaneous Left and Right Truncation available
NEWS	29	AUG 05	New pricing for EUROPATFULL and PCTFULL effective August 1, 2003
NEWS	30	AUG 13	Field Availability (/FA) field enhanced in BEILSTEIN
NEWS	31	AUG 15	PATDPAFULL: one FREE connect hour, per account, in September 2003
NEWS	32	AUG 15	PCTGEN: one FREE connect hour, per account, in September 2003
NEWS	33	AUG 15	RDISCLOSURE: one FREE connect hour, per account, in September 2003
NEWS	34	AUG 15	TEMA: one FREE connect hour, per account, in September 2003
NEWS	35	AUG 18	Data available for download as a PDF in RDISCLOSURE
NEWS	36	AUG 18	Simultaneous left and right truncation added to PASCAL
NEWS	37	AUG 18	FROSTI and KOSMET enhanced with Simultaneous Left and Right

Truncation

NEWS 38 AUG 18 Simultaneous left and right truncation added to ANABSTR

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT  
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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NEWS PHONE Direct Dial and Telecommunication Network Access to STN  
NEWS WWW CAS World Wide Web Site (general information)

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FILE 'HOME' ENTERED AT 12:37:41 ON 17 SEP 2003

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 12:38:03 ON 17 SEP 2003

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STRUCTURE FILE UPDATES: 16 SEP 2003 HIGHEST RN 586945-00-8

DICTIONARY FILE UPDATES: 16 SEP 2003 HIGHEST RN 586945-00-8

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STN Note 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s akvakqekkkktgrakrra/sqsp

L1 1 AKVAKQEKKKKKTGRAKRRRA/SQSP

=> FIL CAPLUS BIOSIS MEDLINE PCTFULL USPATFULL EUROPATFULL JAPIO SCISEARCH EMBASE  
USPAT2 EUROPATFULL

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	27.30	27.51

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FILE 'USPAT2' ENTERED AT 12:38:59 ON 17 SEP 2003  
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=> s l1  
'SQSP' IS NOT A VALID FIELD CODE  
'SQSP' IS NOT A VALID FIELD CODE  
'SQSP' IS NOT A VALID FIELD CODE  
'SQSP' IS NOT A VALID FIELD CODE  
L2 1 L1

=> d l2 bib

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 1998:795125 CAPLUS  
DN 130:35577  
TI Antimicrobial peptides derived from ubiquicidine  
IN Nibbering, Petrus Hendricus; Hiemstra, Pieter Sicco; Van Den Barselaar,  
Maria Theodora; Pauwels, Ernest Karel Jacob; Feitsma, Rolf Ide Johannes  
PA Rijksuniversiteit Leiden, Neth.  
SO PCT Int. Appl., 48 pp.  
CODEN: PIXXD2  
DT Patent  
LA Dutch  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9854314	A1	19981203	WO 1998-NL311	19980529
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	NL 1006164	C2	19981201	NL 1997-1006164	19970529
	AU 9877913	A1	19981230	AU 1998-77913	19980529
	EP 1003854	A1	20000531	EP 1998-925978	19980529

R: AT, BE, CH, DE, FR, GB, IT, LI, NL

PRAI NL 1997-1006164 19970529

WO 1998-NL311 19980529

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2000 ACS  
RN 223747-30-6 REGISTRY  
CN Arsenite-resistance protein (Cricetulus griseus gene asr1) (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN GenBank U41499-derived protein GI 1127861  
FS PROTEIN SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS, TOXLIT

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L7 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2000 ACS  
RN 189304-64-1 REGISTRY  
CN Protein (swine clone dD3 gene fau) (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN GenBank U72543-derived protein GI 1628628  
CN Ubiquitin-like protein (swine clone dD3 gene fau) natural fusion protein with ribosomal protein S30 (swine clone dD3)  
FS PROTEIN SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L7 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2000 ACS  
RN 152413-85-9 REGISTRY  
CN Protein (mouse clone pUIA542 gene fau) (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN GenBank D26610-derived protein  
CN Lymphokine MNSF-.beta. (monoclonal nonspecific suppressor factor .beta.) (mouse uterus clone 1.6-12 gene fau)  
CN Monoclonal nonspecific suppressor factor (mouse hybridoma E17 clone B42 isoform .beta.)  
CN Protein (mouse gene Fau)  
FS PROTEIN SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS, TOXLIT

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L7 ANSWER 4 OF 6 R STRY COPYRIGHT 2000 ACS  
RN 150550-01-9 REGISTRY  
CN Ribosomal protein S30 (rat clone pRS30-12) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Protein S30 (rat ribosome clone pRS30-12)  
CN Ubiquicidine  
FS PROTEIN SEQUENCE  
MF C290 H500 N102 O75 S  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L7 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2000 ACS  
RN 150549-99-8 REGISTRY  
CN Ribosomal protein S30 (rat clone pRS30-12 precursor) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Ubiquitin-like protein-ribosomal protein S30 polyprotein (rat clone pRS30-12 precursor)  
FS PROTEIN SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

L7 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2000 ACS  
RN 148266-62-0 REGISTRY  
CN Protein (human clone 15.1 gene fau) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Fusion protein (human ribosomal protein S30-ubiquitin-like protein)  
CN Protein (human gene fau clone pUIA 631)  
FS PROTEIN SEQUENCE  
MF Unspecified  
CI MAN  
SR CA  
LC STN Files: CA, CANCERLIT, CAPLUS, MEDLINE, TOXLINE, TOXLIT

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
2 REFERENCES IN FILE CA (1967 TO DATE)  
2 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d 18

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2000 ACS  
RN 150550-01-9 REGISTRY  
CN Ribosomal protein S30 (rat clone pRS30-12) (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN Protein S30 (rat ribosome clone pRS30-12)  
CN Ubiquicidine

FS PROTEIN SEQUENCE  
MF C290 H500 N102 O S  
CI MAN  
SR CA  
LC STN Files: CA, CAPLUS

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*  
\*\*\* USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE \*\*\*  
4 REFERENCES IN FILE CA (1967 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> d history

(FILE 'HOME' ENTERED AT 11:08:48 ON 09 JUN 2000)

FILE 'REGISTRY' ENTERED AT 11:09:27 ON 09 JUN 2000

L1 0 S KVGSLARAGVVRGQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/SQEP  
L2 0 S KVGSLARAGVVRGQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/SQSP  
L3 0 S  
KVGSLARAGKVRGQTPKVRGQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/S  
L4 0 S  
KVGSLARAGKVRGQTPKVRGQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/S  
L5 0 S  
KVGSLARAGKVRGQTPKVAGQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/  
L6 0 S  
KVGSLARAGKVRGQTPKVAGQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/  
L7 6 S  
KVGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/S  
L8 1 S  
KVGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/S

=> delete 11-6

DELETE L1-6? (Y)/N:y

'L1-6 ' DELETED

=> d history

(FILE 'HOME' ENTERED AT 11:08:48 ON 09 JUN 2000)

FILE 'REGISTRY' ENTERED AT 11:09:27 ON 09 JUN 2000

L7 6 S  
KVGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/S  
L8 1 S  
KVGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/S  
=> s kvhgsLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/sqep

1  
KVGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/SQEP  
2344 SQL=59  
L9 1  
KVGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/SQEP  
(KVGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/S  
QEP AND SQL=59)

=> file caplus, medline,

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

RY  
139.69

SESSION  
139.84

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=> s 19/dt

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Answer sets created in a different file may be field qualified with a limited set of qualifiers. Enter HELP CROSSOVER at an arrow prompt (= >) for specific information.

=> s 19

L10 4 L9

=> d ibib, abs 1-4

L10 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1998:795125 CAPLUS

DOCUMENT NUMBER: 130:35577

TITLE: Antimicrobial peptides derived from ubiquicidine

INVENTOR(S): Nibbering, Petrus Hendricus; Hiemstra, Pieter Sicco;  
Van Den Barselaar, Maria Theodora; Pauwels, Ernest  
Karel Jacob; Feitsma, Rolf Ide Johannes

PATENT ASSIGNEE(S): Rijksuniversiteit Leiden, Neth.

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Dutch

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854314	A1	19981203	WO 1998-NL311	19980529
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
NL 1006164	C2	19981201	NL 1997-1006164	19970529
AU 9877913	A1	19981230	AU 1998-77913	19980529
EP 1003854	A1	20000531	EP 1998-925978	19980529
R:	AT, BE, CH, DE, FR, GB, IT, LI, NL			
PRIORITY APPLN. INFO.:			NL 1997-1006164	19970529
			WO 1998-N	

L311 19980529

AB The invention relates to the use of ubiquicidine or optionally modified peptide fragments derived therefrom for the prepn. of a drug for the treatment, diagnostics or prophylaxis of infections in humans and animals.



A peptide fragment derived from ubiquitin comprises for instance a preferably continuous series of at least 3, preferably at least 7-13 amino

acids from the amino acid sequence of ubiquitin:

KVHGSLARAGKVRGQTPKVAKEKKKKKTGRAKRRMQYNRRFVNVPTFGKKKGPNANS.

Ubiquitin

was isolated by gel filtration and reverse phase HPLC from the cytosol fraction of murine RAW 264.7 macrophages activated with interferon

.gamma.. Ubiquitin(1-18), ubiquitin(18-35), and

ubiquitin(29-41)

are particularly recommended, with activities about 1 .mu.M.

Ubiquitin(18-36) with N-terminal and C-terminal D-Ala residues is much more potent in eliminating *Klebsiella pneumoniae* in vitro than the unprotected peptide. Hybrid mols. comprise for instance a cationic peptide with an antimicrobial action and/or a peptide fragment of ubiquitin and/or a deriv. thereof and one or more effector mols.

REFERENCE COUNT: 6

REFERENCE(S):

- (1) Kas, K; Biochemical and Biophysical Research Communications 1992, V187(2), P927 CAPLUS
  - (2) Malcherek, G; Int Immunol 1993, V5, P1229 CAPLUS
  - (4) Nelson, C; Proceedings of the National Academy of Sciences of USA 1992, V89(16), P7380 CAPLUS
  - (5) Nisshin Flour Milling Co; JP 04300839 A 1992 CAPLUS
  - (6) Ridgway, W; J Exp Med 1996, V183(4), P1657 CAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1997:419727 CAPLUS

DOCUMENT NUMBER: 127:158094

TITLE: Post-translational processing of rat ribosomal proteins. Ubiquitous methylation of Lys22 within the zinc-finger motif of RL40 (carboxy-terminal extension protein 52) and tissue-specific methylation of Lys4

in

RL29

AUTHOR(S): Williamson, Nicholas A.; Ralieggh, Jeanette; Morrice, Nicholas A.; Wettenhall, Richard E. H.

CORPORATE SOURCE: Russell Grimwade School of Biochemistry and Molecular Biology, University of Melbourne, Parkville, 3052, Australia

SOURCE: Eur. J. Biochem. (1997), 246(3), 786-793  
CODEN: EJBCAI; ISSN: 0014-2956

PUBLISHER: Springer

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The complete amino acid sequences of rat and yeast (*Saccharomyces cerevisiae*) ribosomal proteins derived from precursors contg. an N-terminal ubiquitin or ubiquitin-like sequence (C-terminal extension proteins or CEPs) were detd. and investigated for any post-translational modifications by reverse-phase HPLC purifn., direct amino acid sequence and mass spectrometric analyses. Covalent modifications were detected in the rat liver proteins RS27a (CEP-80), RL29, RL37 and RL40 (CEP-52),

while

RS30 (CEP), RL36a, RL39 and RL41 were unmodified. Heterogeneity of RS27a was due to C-terminal truncations, with Lys80 missing from about 20% of the liver RS27a population; C-terminal processing was also detected with RL29 and RL37. No other covalent modifications of liver, brain or thymus RS27a were detected. The rat RL40 structure was identical to the cDNA-predicted sequence except for complete stoichiometric N.epsilon.-trimethylation of Lys22 within its zinc-finger motif; this modification occurred in the ribosomes of all three rat tissues investigated but not in yeast ribosomes. The methylation characteristics

of RL40 were distinct from those of ribosomal protein in RL29 in the rat, which was differentially monomethylated at Lys4 in the liver, brain and thymus (27%, > 99% and 95% methylation, resp.). In the case of liver, there was no appreciable difference in the RL29 methylation status of free and membrane-bound ribosomes. The possibilities of an essential role for RL40 methylation in the formation of rat ribosomes, and a distinct regulatory role for RL29 methylation in the rat, are discussed.

L10 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1994:601807 CAPLUS  
 DOCUMENT NUMBER: 121:201807  
 TITLE: New protein having heparin binding activity of rat brain  
 INVENTOR(S): Kimura, Michio; Ito, Motofumi  
 PATENT ASSIGNEE(S): Hoechst Japan, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05339287	A2	19931221	JP 1992-145125	19920605

GI

H-Lys-Val-His-Gly-Ser-Leu-Ala-Arg-Ala-Gly-Lys-Val-Arg-Gly-  
 Gln-Thr-Pro-Lys-Val-Ala-Lys-Gln-Glu-Lys-Lys-Lys-Lys-Lys-Thr-  
 Gly-Arg-Ala-Lys-Arg-Arg-Met-Gln-Tyr-Asn-Arg-Arg-Phe-  
 Val-Asn-Val-Val-Pro-Thr-Phe-Gly-Lys-  
 Lys-Lys-Gly-Pro-Asn-Ala-Asn-Ser-OH

I

AB A heparin-binding protein (HBP-p7) (I) consisting of 59 amino acid residues was isolated from rat (*Rattus norvegicus*) brain by purifn. using a heparin-Sepharose column and HPLC. The purified protein I in vitro promoted the growth of fibroblast cells. It is useful as cell growth-promoting agent and for the treatment of wounds and bone diseases.

L10 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1993:598010 CAPLUS  
 DOCUMENT NUMBER: 119:198010  
 TITLE: The carboxyl extension of a ubiquitin-like protein is rat ribosomal protein S30  
 AUTHOR(S): Olvera, Joe; Wool, Ira G.  
 CORPORATE SOURCE: Dep. Biochem. Mol. Biol., Univ. Chicago, Chicago, IL, 60637, USA  
 SOURCE: J. Biol. Chem. (1993), 268(24), 17967-74  
 CODEN: JBCHA3; ISSN: 0021-9258  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The amino acid sequence of the rat 40 S ribosomal subunit protein S30 was deduced from the sequence of nucleotides in a recombinant cDNA and confirmed by the detn. of the 18 residues at the NH2 terminus of the protein. Unlike the majority of ribosomal proteins, which are unprocessed

primary products of the translation of their mRNAs. S30 is formed by cleavage from a larger hybrid protein. The NH<sub>2</sub>-terminal polypeptide has 38% identity with ubiquitin and contains the characteristic carboxyl-terminal Gly-Gly dipeptide of this family of proteins. S30 has 59 amino acids and the mol. wt. is 6,643; the ubiquitin-like sequence has 74 residues and the mol. wt. is 7,634. The hybrid protein is encoded in each of the 8-10 members of the family of rat S30 genes; there is, however, only a single species of mRNA which contains the sequences for both proteins. The coding sequence of the hybrid protein occurs in the reverse polarity in the genome of the Finkel-Biskis-Reilly murine sarcoma virus.

=> s kvhgslaragkvrqgtpkvakqekkkkkktgrakrrmqynrrfvnvptfgkkkgpnans/sqsp

'SQSP' IS NOT A VALID FIELD CODE

'SQSP' IS NOT A VALID FIELD CODE

L11 0

KVHGSLARAGKVRGQTPKVAQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/SQSP

=> file registry

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	9.84	149.68
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-2.23	-2.23

FILE 'REGISTRY' ENTERED AT 11:23:01 ON 09 JUN 2000  
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=> s kvhgslaragkvrqgtpkvakqekkkkkktgrakrrmqynrrfvnvptfgkkkgpnans/sqsp

L12 6

KVHGSLARAGKVRGQTPKVAQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS/SQSP

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=> s 112

L13 21 L12

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L14 16 DUPLICATE REMOVE L13 (5 DUPLICATES REMOVED)

=> d ibib, abs 1-16

L14 ANSWER 1 OF 16 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 2000:177718 CAPLUS

DOCUMENT NUMBER: 132:320122

TITLE: Identification of monoclonal nonspecific suppressor factor beta (MNSF.beta.) as one of the genes differentially expressed at implantation sites compared to interimplantation sites in the mouse uterus

AUTHOR(S): Nie, Gui-Ying; Li, Ying; Hampton, Anne L.; Salamonsen,

CORPORATE SOURCE: Lois A.; Clements, Judith A.; Findlay, Jock K. Prince Henry's Institute of Medical Research, Clayton,

SOURCE: 3168, Australia  
Mol. Reprod. Dev. (2000), 55(4), 351-363  
CODEN: MREDEE; ISSN: 1040-452X

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Successful implantation requires synchronous development of and active dialogue between the maternal endometrium and the implanting blastocyst. While it is well established that appropriate maternal steroid hormones are essential for endometrial prepn. for implantation, the mol. events at the actual site of implantation are still little understood. The aims of our studies were to identify genes explicitly expressed or repressed at the sites of implantation by utilizing RNA differential display (DDPCR), and to establish the roles of these genes in the implantation process in

a mouse model. Ten bands unique in implantation sites compared to interimplantation sites were identified by DDPCR and subsequently confirmed by Northern blotting. One of these bands contained a cDNA fragment that was highly homologous to mouse monoclonal nonspecific suppressor factor beta (MNSF.beta.) or Fau. The full cDNA sequence of this gene, obtained by screening a .lambda.gt11 cDNA library, was essentially the same as MNSF.beta., except that it had much longer 5' untranslated region. Interestingly, both Northern and immunohistochem. anal. showed that the expression of this gene was much lower in implantation sites compared to interimplantation sites on day 4.5 of pregnancy, when embryos first attach to the uterus and initiate implantation, and on day 5.5, when implantation has advanced. These results suggest a role for MNSF during implantation and early pregnancy, possibly through regulating the proliferation and/or differentiation of uterine stromal cells. It may also be involved in the selective prodn.

of

TH2-type cytokin in implantation sites to regulate the immune system at the maternal-fet interface.

REFERENCE COUNT: 34

REFERENCE(S): (1) Bigsby, R; Endocrinology 1994, V134, P1820 CAPLUS  
(2) Chomczynski, P; Anal Biochem 1987, V162, P156 CAPLUS  
(3) Ding, Y; Endocrinology 1994, V135, P2265 CAPLUS  
(4) Everett, L; Endocrinology 1997, V138, P3836

CAPLUS

(5) Glasser, S; Biol Reprod 1986, V35, P463 CAPLUS  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 2 OF 16 MEDLINE

ACCESSION NUMBER: 2000069078 MEDLINE

DOCUMENT NUMBER: 20069078

TITLE: Molecular characterization of human and murine Cllorf5, a new member of the FAUNA gene cluster.

AUTHOR: Lemmens I H; Farnebo F; Piehl F; Merregaert J; Van de Ven W

CORPORATE SOURCE: J; Larsson C; Kas K  
Laboratory for Molecular Oncology, Center for Human Genetics, University of Leuven & Flanders Interuniversity Institute for Biotechnology, Center for Human Genetics, KU Leuven, Herestraat 49, B-3000 Leuven, Belgium.

SOURCE: MAMMALIAN GENOME, (2000 Jan) 11 (1) 78-80.

Journal code: BES. ISSN: 0938-8990.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

OTHER SOURCE: GENBANK-AF119497; GENBANK-AF119498

ENTRY MONTH: 200004

ENTRY WEEK: 20000401

L14 ANSWER 3 OF 16 MEDLINE

ACCESSION NUMBER: 1999424631 MEDLINE

DOCUMENT NUMBER: 99424631

TITLE: Ubiquicidin, a novel murine microbicidal protein present in

the cytosolic fraction of macrophages.

AUTHOR: Hiemstra P S; van den Barselaar M T; Roest M; Nibbering P H; van Furth R

CORPORATE SOURCE: Department of Infectious Diseases, Leiden University Medical Center, The Netherlands.

SOURCE: JOURNAL OF LEUKOCYTE BIOLOGY, (1999 Sep) 66 (3) 423-8.

Journal code: IWY. ISSN: 0741-5400.

PUB. COUNTRY: United States

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals; Cancer Journals

ENTRY MONTH: 199912

ENTRY WEEK: 19991202

AB Previously we have identified and characterized three murine microbicidal proteins purified from the granule fraction of cells from the murine macrophage cell line RAW264.7. During these studies evidence was obtained for the presence of an additional antimicrobial protein in the cytosolic fraction of RAW264.7 cells that had been activated with interferon-gamma (IFN-gamma). In this study we have purified this protein, designated ubiquicidin, to apparent homogeneity and demonstrated that it is a cationic, small (Mr 6654) protein. Ubiquicidin displayed marked antimicrobial activity against *Listeria monocytogenes* and *Salmonella typhimurium*. Using a gel overlay procedure evidence was obtained that the protein also displays activity against *Escherichia coli*, *Staphylococcus*

aureus, and an avirulent strain of Yersinia enterocolitica. Aminoterminal amino acid sequencing and mass spectrometry analysis of purified ubiquicidin indicated that it is most likely identical to the ribosomal protein S30. This protein is produced by posttranslational processing of the Fau protein, a 133-amino-acid fusion protein consisting of S30 linked to an unusual peptide with significant homology to ubiquitin. The fau gene has been reported to be expressed in a variety of tissues in humans and various animal species. The presence of ubiquicidin in the cytosol of macrophages may serve to restrict the intracellular growth of microorganisms. In addition, because macrophage disintegration will likely lead to release of ubiquicidin into the extracellular environment, it may contribute to host defense after macrophage death.

L14 ANSWER 4 OF 16 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 1  
 ACCESSION NUMBER: 1999:151367 CAPLUS  
 DOCUMENT NUMBER: 130:321381  
 TITLE: Expression cloning for arsenite-resistance resulted in isolation of tumor-suppressor fau cDNA: possible involvement of the ubiquitin system in arsenic carcinogenesis  
 AUTHOR(S): Rossman, Toby G.; Wang, Zaolin  
 CORPORATE SOURCE: Nelson Institute of Environmental Medicine and Kaplan Comprehensive Cancer Center, New York University Medical Center, New York, NY, 10016, USA  
 SOURCE: Carcinogenesis (1999), 20(2), 311-316  
 CODEN: CRNGDP; ISSN: 0143-3334  
 PUBLISHER: Oxford University Press  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Arsenic is a human carcinogen whose mechanism of action is unknown. Previously, this lab. demonstrated that arsenite acts as a comutagen by interfering with DNA repair, although a specific DNA repair enzyme sensitive to arsenite has not been identified. A no. of stable arsenite-sensitive and arsenite-resistant sublines of Chinese hamster V79 cells have now been isolated. In order to gain understanding of possible targets for arsenite's action, one arsenite-resistant subline, As/R28A, was chosen as a donor for a cDNA expression library. The library from arsenite-induced As/R28A cells was transfected into arsenite-sensitive As/S5 cells, and transfectants were selected for arsenite-resistance.

Two cDNAs, asr1 and asr2, which confer arsenite resistance to arsenite-hypersensitive As/S5 cells as well as to wild-type cells, were isolated. Asr1 shows almost complete homol. with the rat fau gene, a tumor suppressor gene which contains a ubiquitin-like region fused to S30 ribosomal protein. Arsenite was previously shown to inhibit ubiquitin-dependent proteolysis. These results suggest that the tumor suppressor fau gene product or some other aspect of the ubiquitin system may be a target for arsenic toxicity and that disruption of the ubiquitin system may contribute to the genotoxicity and carcinogenicity of arsenite.

REFERENCE COUNT: 63  
 REFERENCE(S): (1) Ananthan, J; Science 1986, V232, P522 CAPLUS  
 (2) Aposhian, H; Rev Biochem Toxicol 1989, V10, P265 CAPLUS  
 (3) Bailly, V; Genes Dev 1994, V8, P811 CAPLUS  
 (5) Bond, U; Mol Cell Biol 1985, V5, P949 CAPLUS  
 (6) Chomczynski, P; Anal Biochem 1987, V162, P156 CAPLUS  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 16 PLUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1998:795125 CAPLUS  
 DOCUMENT NUMBER: 130:35577  
 TITLE: Antimicrobial peptides derived from ubiquicidine  
 INVENTOR(S): Nibbering, Petrus Hendricus; Hiemstra, Pieter Sicco;  
 Van Den Barselaar, Maria Theodora; Pauwels, Ernest  
 Karel Jacob; Feitsma, Rolf Ide Johannes  
 PATENT ASSIGNEE(S): Rijksuniversiteit Leiden, Neth.  
 SOURCE: PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Dutch  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9854314	A1	19981203	WO 1998-NL311	19980529
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
NL 1006164	C2	19981201	NL 1997-1006164	19970529
AU 9877913	A1	19981230	AU 1998-77913	19980529
EP 1003854	A1	20000531	EP 1998-925978	19980529
R: AT, BE, CH, DE, FR, GB, IT, LI, NL				
PRIORITY APPLN. INFO.:			NL 1997-1006164	19970529
			WO 1998-N	

L311 19980529

AB The invention relates to the use of ubiquicidine or optionally modified peptide fragments derived therefrom for the prepn. of a drug for the treatment, diagnostics or prophylaxis of infections in humans and animals.

A peptide fragment derived from ubiquicidine comprises for instance a preferably continuous series of at least 3, preferably at least 7-13 amino

acids from the amino acid sequence of ubiquicidine:

KVHGSLARAGKVRGQTPKVAKQEKKKKKKTGRAKRRMQYNRRFVNVVPTFGKKKGPNANS.

Ubiquicidine

was isolated by gel filtration and reverse phase HPLC from the cytosol fraction of murine RAW 264.7 macrophages activated with interferon .gamma.. Ubiquicidine(1-18), ubiquicidine(18-35), and

ubiquicidine(29-41)

are particularly recommended, with activities about 1 .mu.M.

Ubiquicidine(18-36) with N-terminal and C-terminal D-Ala residues is much more potent in eliminating Klebsiella pneumoniae in vitro than the unprotected peptide. Hybrid mols. comprise for instance a cationic peptide with an antimicrobial action and/or a peptide fragment of ubiquicidine and/or a deriv. thereof and one or more effector mols.

REFERENCE COUNT: 6

REFERENCE(S):

- (1) Kas, K; Biochemical and Biophysical Research Communications 1992, V187(2), P927 CAPLUS
  - (2) Malcherek, G; Int Immunol 1993, V5, P1229 CAPLUS
  - (4) Nelson, C; Proceedings of the National Academy of Sciences of USA 1992, V89(16), P7380 CAPLUS
  - (5) Nisshin Flour Milling Co; JP 04300839 A 1992 CAPLUS
  - (6) Ridgway, W; J Exp Med 1996, V183(4), P1657 CAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 16 LUS COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 1997:419727 CAPLUS  
 DOCUMENT NUMBER: 127:158094  
 TITLE: Post-translational processing of rat ribosomal proteins. Ubiquitous methylation of Lys22 within the zinc-finger motif of RL40 (carboxy-terminal extension protein 52) and tissue-specific methylation of Lys4

in  
 RL29  
 AUTHOR(S): Williamson, Nicholas A.; Ralieggh, Jeanette; Morrice, Nicholas A.; Wettenhall, Richard E. H.  
 CORPORATE SOURCE: Russell Grimwade School of Biochemistry and Molecular Biology, University of Melbourne, Parkville, 3052, Australia  
 SOURCE: Eur. J. Biochem. (1997), 246(3), 786-793  
 CODEN: EJBCAI; ISSN: 0014-2956  
 PUBLISHER: Springer  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The complete amino acid sequences of rat and yeast (*Saccharomyces cerevisiae*) ribosomal proteins derived from precursors contg. an N-terminal ubiquitin or ubiquitin-like sequence (C-terminal extension proteins or CEPs) were detd. and investigated for any post-translational modifications by reverse-phase HPLC purifn., direct amino acid sequence and mass spectrometric analyses. Covalent modifications were detected in the rat liver proteins RS27a (CEP-80), RL29, RL37 and RL40 (CEP-52), while RS30 (CEP), RL36a, RL39 and RL41 were unmodified. Heterogeneity of RS27a was due to C-terminal truncations, with Lys80 missing from about 20% of the liver RS27a population; C-terminal processing was also detected with RL29 and RL37. No other covalent modifications of liver, brain or thymus RS27a were detected. The rat RL40 structure was identical to the cDNA-predicted sequence except for complete stoichiometric N.epsilon.-trimethylation of Lys22 within its zinc-finger motif; this modification occurred in the ribosomes of all three rat tissues investigated but not in yeast ribosomes. The methylation characteristics of RL40 were distinct from those of ribosomal protein RL29 in the rat, which was differentially monomethylated at Lys4 in the liver, brain and thymus (27%, > 99% and 95% methylation, resp.). In the case of liver, there was no appreciable difference in the RL29 methylation status of free and membrane-bound ribosomes. The possibilities of an essential role for RL40 methylation in the formation of rat ribosomes, and a distinct regulatory role for RL29 methylation in the rat, are discussed.

L14 ANSWER 7 OF 16 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 2  
 ACCESSION NUMBER: 1997:206802 CAPLUS  
 DOCUMENT NUMBER: 126:316135  
 TITLE: Ubiquitin is physiologically induced by interferons

in  
 luminal epithelium of porcine uterine endometrium in early pregnancy: global RT-PCR cDNA in place of RNA for differential display screening

AUTHOR(S): Chwetzoff, Serge; d'Andrea, Sabine  
 CORPORATE SOURCE: Institut National de la Recherche Agronomique, Laboratoire de Virologie et d'Immunologie Moleculaires, F78350 Jouy-en-Josas, Fr.  
 SOURCE: FEBS Lett. (1997), 405(2), 148-152  
 CODEN: FEBLAL; ISSN: 0014-5793  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English



AB Early in the course of pregnancy, at the preimplantation stage, the pig embryo is likely to exert a paracrine effect on the tissue intended to receive it, via the secretion of interferons. The observations show that trophoblastic interferons induce an increase of some mRNAs in the epithelial cells of the gilt endometrium, which would illustrate this phenomenon. The increase of four mRNAs, whose corresponding cDNAs are dD1, dD2, dD3 and dD4, has been examined in this study. The method used is similar to Northern blot analysis except that mRNAs in the blot are replaced by cDNAs produced from total cellular poly(A)<sup>+</sup> mRNAs by global reverse-transcription polymerase chain reaction (RT-PCR). Northern blot hybridization requires a considerable quantity of starting material - which the authors estimate in this study to be several million porcine endometrium cells - whereas the RT-PCR-based method gives comparable results starting with only a few cells - about 200. Using this method, the differential nature of dD1, dD2, dD3 and dD4 was shown. DD2 and dD3 correspond to genes already identified as interferon-induced: the  $\beta$ -2-microglobulin and Finkel-Biskis-Reilly murine sarcoma virus-associated ubiquitously secreted protein (FAU). DD1 corresponds to a still unidentified gene. DD4 encodes for the porcine Uba52 ubiquitin.

Up to now, the increase in ubiquitin mRNA as a result of interferon effect has not been reported and is discussed in view of recent publications.

L14 ANSWER 8 OF 16 MEDLINE  
ACCESSION NUMBER: 96374840 MEDLINE  
DOCUMENT NUMBER: 96374840  
TITLE: Isolation, cDNA, and genomic structure of a conserved gene (NOF) at chromosome 11q13 next to FAU and oriented in the opposite transcriptional orientation.  
AUTHOR: Kas K; Lemahieu V; Meyen E; Van de Ven W J M; Merregaert J  
CORPORATE SOURCE: Laboratory for Molecular Oncology, Center for Human Genetics, University of Leuven & Flanders Interuniversity Institute for Biotechnology, Herestraat 49, Leuven, B-3000, Belgium.  
SOURCE: GENOMICS, (1996 Jun 15) 34 (3) 433-6.  
Journal code: GEN. ISSN: 0888-7543.  
PUB. COUNTRY: United States  
Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-U39400  
ENTRY MONTH: 199611

AB In our effort to characterize a gene at chromosome 11q13 involved in a t(11;17)(q13;q21) translocation in B-non-Hodgkin lymphoma, we have identified a novel human gene, NOF (Neighbour of FAU). It maps right next to FAU in a head to head configuration separated by a maximum of 146 nucleotides. cDNA clones representing NOF hybridized to a 2.2-kb mRNA present in all tissues tested. The largest open reading frame appeared to contain 166 amino acids and is proline rich, and the sequence shows no homology with any known gene in the public databases. The NOF gene consists of 4 exons and 3 introns spanning approximately 5 kb, and the boundaries between exons and introns follow the GT/AG rule. The NOF locus is conserved during evolution, with the predicted protein having over 80% identity to three translated mouse and rat ESTs of unknown function. Moreover, the mouse ESTs map in the same organization, closely linked to the FAU gene, in the mouse genome. NOF, however, is not affected by the t(11;17)(q13;q21) chromosomal translocation.

L14 ANSWER 9 OF 16 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 3  
ACCESSION NUMBER: 1995:510505 CAPLUS  
DOCUMENT NUMBER: 123:277195  
TITLE: Molecular cloning and characterization of a cDNA

encoding monoclonal nonspecific suppressor factor  
 AUTHOR(S): Nakamura, Morihiko; Xavier, Ricardo M.; Tsunematsu,  
 Tokugoro; Tanigawa, Yoshinori  
 CORPORATE SOURCE: Dep. of Biochemistry, Shimane Medical Univ., Izumo,  
 693, Japan  
 SOURCE: Proc. Natl. Acad. Sci. U. S. A. (1995), 92(8), 3463-7  
 CODEN: PNASA6; ISSN: 0027-8424  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB The monoclonal nonspecific suppressor factor (MNSF) is a lymphokine product of a murine T-cell hybridoma that inhibits the generation of lipopolysaccharide-induced Ig-secreting cells in an antigen-nonspecific manner. A cDNA clone encoding MNSF.beta. (an isoform of MNSF) was isolated and expressed in bacteria. The sequence obtained is virtually identical to the Fau protein, a product of the ubiquitously expressed fau gene with unknown function. Northern blot anal. demonstrated a single, 0.6-kb transcript. Specific polyclonal antibodies against synthetic peptides corresponding to the deduced amino acid sequences were elicited in rabbits. Immunopptn. expts. with these antibodies showed that MNSF.beta. is released extracellularly in an aggregate form, albeit it lacks a signal peptide sequence. The anti-MNSF.beta. affinity eluate from the MNSF-producing murine hybridoma (E17) and Con A-activated splenocyte culture supernatants inhibited the Ig prodn. by lipopolysaccharide-activated splenocytes. Recombinant MNSF.beta. also showed a similar biol. activity. Thus, ubiquitin-like protein(s) may be involved in the regulation of the immune responses.

L14 ANSWER 10 OF 16 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 4

ACCESSION NUMBER: 1995:357171 CAPLUS

DOCUMENT NUMBER: 123:26818

TITLE: The mouse Fau gene: genomic structure, chromosomal localization, and characterization of two retropseudogenes

AUTHOR(S): Casteels, D.; Poirier, C.; Guenet, J.-L.; Merregaert, J.

CORPORATE SOURCE: Department of Biochemistry, University of Antwerp, Wilrijk, B-2610, Belg.

SOURCE: Genomics (1995), 25(1), 291-4  
 CODEN: GNMCEP; ISSN: 0888-7543

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Fau gene is the cellular homolog of the fox sequence of the Finkel-Biskis-Reilly murine sarcoma virus (FBR-MuSV). FBR-MuSV acquired the Fau gene by transduction in a transcriptional orientation opposite to that of the genomic Fau gene. The genomic structure of the mouse Fau gene (MMFAU) and its up-stream elements have been detd. and are similar to those of the human FAU gene. The gene consists of five exons and is located on chromosome 19. The first exon is not translated. The promoter region has no well-defined TATA box but contains the polypyrimidine initiator flanked by regions of high GC content (65%) and shows all of the characteristics of a housekeeping gene. The 5' end of the mRNA transcript was detd. by 5' RACE anal. and is located, as expected, in the polypyrimidine initiator site. Furthermore, the sequences of two retropseudogenes (Fau-ps1 and Fau-ps2) are reported. Both pseudogenes are approx. 75% identical to the Fau cDNA, but both are shorter due to a deletion at the 5' end and do not encode a functional protein. Fau-prs is

interrupted by a AG-rich region of about 350 bp within the S30 region of the Fau cDNA. Fau-ps1 was localized on chromosome 2 and Fau-ps2 on chromosome 7.

L14 ANSWER 11 OF 16 MEDLINE

ACCESSION NUMBER: 95369703 MEDLINE  
DOCUMENT NUMBER: 95369703  
TITLE: Characterization of a processed pseudogene of human FAU1 on chromosome 18.  
AUTHOR: Kas K; Stickens D; Merregaert J  
CORPORATE SOURCE: Department of Biochemistry, University of Antwerp, Wilrijk, Belgium..  
SOURCE: GENE, (1995 Jul 28) 160 (2) 273-6.  
PUB. COUNTRY: Netherlands  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-U02523  
ENTRY MONTH: 199511

AB A member of the human FAU (Finkel-Biskis-Reilly murine sarcoma virus-associated ubiquitously expressed) gene subfamily, encoding the ribosomal protein S30 fused in frame to an ubiquitin-like protein, was cloned, sequenced and analysed. This clone, FAU1P, is a processed pseudogene with a completely intact, although transcriptionally silent, open reading frame of 137 codons. FAU1P exhibits an amplification of the (AAG) triplet repeat present in the S30 coding part of FAU. FAU1P is integrated in an antisense orientation within a sequence homologous to the promoter of the islet amyloid polypeptide (IAPP or amylin)-encoding gene. By means of PCR hybrid panel mapping, FAU1P was assigned to chromosome 18.

L14 ANSWER 12 OF 16 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1994:601807 CAPLUS  
DOCUMENT NUMBER: 121:201807  
TITLE: New protein having heparin binding activity of rat brain  
INVENTOR(S): Kimura, Michio; Ito, Motofumi  
PATENT ASSIGNEE(S): Hoechst Japan, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05339287	A2	19931221	JP 1992-145125	19920605

GI

H-Lys-Val-His-Gly-Ser-Leu-Ala-Arg-Ala-Gly-Lys-Val-Arg-Gly-  
Gln-Thr-Pro-Lys-Val-Ala-Lys-Gln-Glu-Lys-Lys-Lys-Lys-Lys-Thr-  
Gly-Arg-Ala-Lys-Arg-Arg-Met-Gln-Tyr-Asn-Arg-Arg-Phe-  
Val-Asn-Val-Val-Pro-Thr-Phe-Gly-Lys-  
Lys-Lys-Gly-Pro-Asn-Ala-Asn-Ser-OH

I

H-Lys-Val-His-Gly-Ser-Leu-Ala-Arg-Ala-Gly-Lys-Val-Arg-Leu-  
 Gln-Thr-Pro-Lys-Val-Ala-Lys-Gln-Glu-Lys-Lys-Lys-Lys-Lys-Thr-  
 Gly-Arg-Ala-Lys-Arg-Arg-Met-Gln-Tyr-Asn-Arg-Arg-Phe-  
 Val-Asn-Val-Val-Pro-Thr-Phe-Gly-Lys-  
 Lys-Lys-Gly-Pro-Asn-Ala-Asn-Ser-OH

I

AB A heparin-binding protein (HBP-p7) (I) consisting of 59 amino acid residues was isolated from rat (*Rattus norvegicus*) brain by purifn. using a heparin-Sepharose column and HPLC. The purified protein I in vitro promoted the growth of fibroblast cells. It is useful as cell growth-promoting agent and for the treatment of wounds and bone diseases.

L14 ANSWER 13 OF 16 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1993:598010 CAPLUS

DOCUMENT NUMBER: 119:198010

TITLE: The carboxyl extension of a ubiquitin-like protein is rat ribosomal protein S30

AUTHOR(S): Olvera, Joe; Wool, Ira G.

CORPORATE SOURCE: Dep. Biochem. Mol. Biol., Univ. Chicago, Chicago, IL, 60637, USA

SOURCE: J. Biol. Chem. (1993), 268(24), 17967-74

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The amino acid sequence of the rat 40 S ribosomal subunit protein S30 was deduced from the sequence of nucleotides in a recombinant cDNA and confirmed by the detn. of the 18 residues at the NH2 terminus of the protein. Unlike the majority of ribosomal proteins, which are

unprocessed

primary products of the translation of their mRNAs, S30 is formed by cleavage from a larger hybrid protein. The NH2-terminal polypeptide has 38% identity with ubiquitin and contains the characteristic carboxyl-terminal Gly-Gly dipeptide of this family of proteins. S30 has 59 amino acids and the mol. wt. is 6,643; the ubiquitin-like sequence has 74 residues and the mol. wt. is 7,634. The hybrid protein is encoded in each of the 8-10 members of the family of rat S30 genes; there is, however, only a single species of mRNA which contains the sequences for both proteins. The coding sequence of the hybrid protein occurs in the reverse polarity in the genome of the Finkel-Biskis-Reilly murine sarcoma virus.

L14 ANSWER 14 OF 16 CAPLUS COPYRIGHT 2000 ACS

ACCESSION NUMBER: 1994:74417 CAPLUS

DOCUMENT NUMBER: 120:74417

TITLE: fau cDNA encodes a ubiquitin-like-S30 fusion protein and is expressed as an antisense sequence in the Finkel-Biskis-Reilly murine sarcoma virus

AUTHOR(S): Michiels, L.; Van der Rauwelaert, E.; Van Hasselt, F.;

Kas, K.; Merregaert, J.

CORPORATE SOURCE: Dep. Biochem., Univ. Antwerp, Wilrijk, B-2610, Belg.

SOURCE: Oncogene (1993), 8(9), 2537-46

CODEN: ONCNES; ISSN: 0950-9232

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The Finkel-Biskis-Reilly murine sarcoma virus (FBR-MuSV) is capable of inducing osteosarcomas in susceptible mice. This retrovirus transduced

sequences derived from the transcription factor c-fos and from an unrelated mouse sequence called fox. Here, the authors describe the cloning and sequence anal. of human and mouse cellular cDNAs hybridizing to the fox sequence. The cloned cDNAs encode for a single ubiquitin-like (Fubi) protein fused in frame to S30, a protein of the small ribosomal subunit. Fubi conserved amino acid residues known to be involved in the TP-dependent proteolytic activity of ubiquitin. Moreover, the fau gene is conserved in several species, while its mRNA is ubiquitously expressed in different mouse tissues. Surprisingly, FBR-MuSV transduced the complete but mutated open reading frame (ORF) in its reversed transcriptional orientation. This is the first report about a retrovirus in which an antisense sequence to a cellular gene, which the authors called fau (FBR-MuSV-assocd. ubiquitously expressed gene), is discovered. Rat-2 cells transfected with plasmids contg. v-fau/fox recombinants of FBR-MuSV revealing a 2-fold increase of the transformation capacity of FBR-MuSV in vitro because of the fau antisense sequence. Newly formed retropseudogenes were identified in 3 out of 8 primary radiation-induced osteosarcomas. This high incidence of creating retropseudogenes in these 90Sr-induced bone tumors may contribute to the mechanism by which FBR-MuSV, originally isolated from such tumors, acquired the fau gene in its reverse orientation.

L14 ANSWER 15 OF 16 MEDLINE

ACCESSION NUMBER: 94206867 MEDLINE

DOCUMENT NUMBER: 94206867

TITLE: Molecular mapping of the chromosome 11 breakpoint of t(11;17)(q13;q21) in a t(11;14)(q13;q32)-positive B non-Hodgkin's lymphoma.

AUTHOR: Wlodarska I; Schoenmakers E; Kas K; Merregaert J; Lemahieu V; Weier U; Van den Berghe H; Van de Ven W J

CORPORATE SOURCE: Center for Human Genetics, University of Leuven, Belgium..

SOURCE: GENES, CHROMOSOMES AND CANCER, (1993 Dec) 8 (4) 224-9. Journal code: AYV. ISSN: 1045-2257.

PUB. COUNTRY: United States  
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199407

AB The FAU gene is the cellular homologue of the viral FOX sequences in the genome of the Finkel-Biskis-Reilly murine sarcoma virus (FBR-MuSV); the viral FOX sequences have been shown to increase the transforming capacity of FBR-MuSV in vitro. The human FAU gene has recently been isolated, characterized, and mapped to chromosome band 11q13. Here, we report results of fluorescence in situ hybridization (FISH) analysis which indicate that the FAU gene maps proximally to the putative oncogene BCL1 at 11q13. Furthermore, we identified a t(11;17)(q13;q21) translocation in tumor cells of a t(11;14)(q13;q32)-positive B-cell non-Hodgkin's lymphoma patient by FISH analysis using a FAU containing cosmid clone as molecular probe and by double-colour chromosome painting analysis using chromosome 11- and chromosome 17-specific painting probes. The position of the chromosome 11 breakpoint of the t(11;17) translocation was pinpointed to

a human DNA region around the FAU gene of about 40 kbp.

L14 ANSWER 16 OF 16 CAPLUS COPYRIGHT 2000 ACS DUPLICATE 5

ACCESSION NUMBER: 1993:421803 CAPLUS

DOCUMENT NUMBER: 119:21803

TITLE: Genomic structure and expression of the human fau gene: encoding the ribosomal protein S30 fused to a ubiquitin-like protein

AUTHOR(S): Kas, Koen; Michiels, Luc; Merregaert, Jozef

CORPORATE SOURCE: Dep. Biochem., Univ. Antwerp, Wilrijk, B-2610, Belg.  
SOURCE: Biochem. Biophys. Res. Commun. (1992), 187(2), 927-33  
CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The fau gene is the cellular homolog of the fox sequence in the  
Finkel-Biskis-Reilly Murine Sarcoma Virus (FBR-MuSV). This virus  
acquired

the fau sequence in its reversed transcriptional orientation. Human and  
mouse fau cDNA's were identified and both encode a new protein of 133 AA.  
Now, the authors show that fau (for FBR-MuSV assocd. ubiquitiously  
expressed gene) becomes expressed in all different tissues tested as a

600

bp mRNA, and the genomic structure of the human fau gene is described.  
The gene consists of five exons and four introns and the 5' untranslated  
region displays characteristic features for a housekeeping gene. Fau  
encodes the ribosomal protein S30 fused to a Ubiquitin-like protein.